

# MONTHLY NEWS REVIEW

Vol. 3, Issue 4, April 2003

Prepared by Mark Shafer, Oklahoma Climatological Survey

## IN THIS ISSUE:

### NATIONAL

Energy Bill markup planned  
House budget chair calls for deep cuts  
Senate plan brings balance in 2013  
Senate passes budget bill with only half the proposed tax cut  
Blue Dog Democrats unveil budget proposal  
Senate rejects ANWR drilling  
G.O.P. moderates show signs of strength  
Legislator wants to fast-track reorganization  
Energy efficiency bill receives unanimous approval  
Army begins radar tests near Goldsby  
New bioterrorism command center launched  
States scrutinize budgets  
Homeland Security may take on Internet  
*Status of Legislation*

### AGENCY NEWS

NOAA names new assistant administrator  
Administration reconsiders definition of 'inherently governmental'  
Federal employees with pay, but not with management  
OMB looking at new e-gov initiatives  
E-government results mixed  
Online federal store attracts browsers, not buyers  
USGS conference focuses on environmental concerns  
Transportation needs report available

### STATE / LOCAL

More budget cuts ordered for state  
Energy revenues offset losses  
Drought hits rainy day fund  
New study offers recommendations on state budget  
Governor signs tuition bill  
*Oklahoma Legislation*

### BUSINESS / ECONOMY

Gas crunch over, but supply issues remain  
New Internet technology surpasses 8600 Mbps  
Unix owner sues IBM

## WEATHER

Western drought expected to continue  
NWS rolls out new flood website  
Hurricane forecasts extended to five days  
Lake Superior nearly frozen for first time since 1979  
Great lakes near record low levels

## CLIMATE

Climate timeline web site announced  
Pinatubo eruption studied for effects on Arctic Oscillation  
Rising cloud base dries out forests  
Vegetation essential to climate models  
Antarctic ice sheet may hold clues to end of ice age  
Carbon Dioxide critical factor in Antarctic ice  
Sun may play big factor in global warming  
Younger trees better at storing carbon

## ENVIRONMENT

Regulations reviews nearing end  
Domenici seeks FY04 funds for forest management  
India planning major water resources project  
World water crisis worsening  
Oklahoma and Arkansas talking again  
Tulsa settles lawsuit  
Arbuckle aquifer needs further study  
OSU research project examines arsenic in water wells

## SCIENCE & TECHNOLOGY

NRC urges more attention on knowledge transfer  
Federal IT spending increases dramatically  
Seeking Scientists

---

*Monthly News Review* is prepared by the Oklahoma Climatological Survey. Its purpose is to provide a summary of weather and climate news or related issues that may help guide policy-makers in the Oklahoma Weather Center. Along with weather, climate, environmental, and science issues, the review includes issues on the national and state agendas and events that affect major businesses in Oklahoma that bear some relation to demands for weather-related information. The summaries and any opinions expressed herein are those of the author, and in no way reflect positions of the Oklahoma Climatological Survey or the University of Oklahoma.

## NATIONAL

**Energy Bill markup planned** (U.S. Senate 3/31/2003) – Planned markup of a comprehensive energy bill will begin in the Senate Energy and Natural Resources Committee on April 8. Chairman Domenici plans to report the bill on May 1.

**House budget chair calls for deep cuts** (National Journal 3/12/2003) – House Budget Committee Chairman Jim Nussle (R-IA) called for cuts in discretionary and mandatory expenditures in the Committee's 2004 budget resolution. "I don't like deficits. I don't want deficits, and I won't pretend that deficits don't matter" said Nussle. The resolution reduces discretionary funding by \$11 billion over the President's request and makes steep cuts in mandatory programs. The resolution also includes most of the president's tax cut plan. The \$775.4 billion in discretionary spending is still \$9.6 billion more than the 2003 enacted level. The resolution mandates \$470 billion in savings from various committees, requiring a reconciliation package by July 18. The resolution also includes a \$400 billion reserve fund for a Medicare prescription drug proposal. Tax cuts would total \$1.403 trillion over ten years, slightly less than the president's request. The plan would reach a unified balance in ten years, although adding \$760 billion to the deficit, or \$3.327 trillion not counting Social Security surpluses.

<http://www.govexec.com/dailyfed/0303/031203cd1.htm>

**Senate plan brings balance in 2013** (National Review 3/13/2003) – The Senate Budget Committee unveiled its budget plan, which would steadily shrink deficits until a projected \$17 billion surplus in 2013. Like its House counterpart, the Senate bill trims discretionary funding more than the President's budget request. Also like its counterpart, the plan includes \$400 billion for Medicare funding of prescription drug benefits. Chairman Don Nickles (R-OK) noted that government revenues have fallen nine percent over the past two years while spending grew by 12%.

<http://www.govexec.com/dailyfed/0303/031303cdam2.htm>

**Senate passes budget bill with only half the proposed tax cut** (New York Times 3/26/2003) – The Senate approved, by a 56-44 vote, a \$2.2 billion budget resolution for Fiscal Year 2004 that provides only half of what the president requested in tax cuts. The House earlier approved a budget resolution that includes \$726 billion in tax cuts; the Senate measure provides \$350 billion. The Senate budget provides \$791 billion in discretionary funding, up 2.5% from the FY03 appropriation. It does not include supplemental funding requests to cover the war and recovery of Iraq.

**Blue Dog Democrats unveil budget proposal** (The Hill 3/12/2003) – The House Blue Dog coalition, consisting of 34 conservative Democrats, unveiled their own budget proposals. The coalition, claiming to be the sole group in Congress committed to fiscal responsibility, claimed the support of many Republicans, if their budget is allowed to be debated in April. Several members supported the first Bush tax cut, but are at odds with the Administration over further tax cuts. The plan follows the president's budget overall – minus the tax cuts. Other budget proposals are being offered by the Progressive Caucus and a mainline Democratic alternative.

<http://www.hillnews.com/news/031203/bluedogs.aspx>

**Senate rejects ANWR drilling** (Oklahoman 3/20/2003) – By a 52-48 vote, the Senate stripped a measure from the budget bill that would have allowed drilling in a designated part of the Arctic National Wildlife Refuge. Eight Republicans crossed party lines to vote in favor of the ban, while five Democrats crossed over to vote to allow exploration and drilling.

**G.O.P. moderates show signs of strength** (New York Times 3/30/2003) – Recent votes on Capitol Hill have shown the importance of Republican moderates. In recent votes, two major Bush Administration initiatives were defeated by narrow margins: opening up ANWR to oil exploration and the \$726 billion tax cut, which was cut in half in the Senate. The centrists wield most power in the Senate, where two or three defections from the party line can spell defeat, but they are also a substantial force in the House. The budget bill in the House passed by a narrow 215-212 vote, as 12 Republicans crossed party lines. Although several are willing to cross lines on some issues, it remains to be seen if enough of them would be willing to vote against the budget that comes out of conference committee, especially if many of the Administration's tax cuts are restored.

**Legislator wants to fast-track reorganization** (Government Executive 3/10/2003) – House Government Reform Committee Chairman Tom Davis (R-VA) is seeking to “fast-track” government reorganization. Davis, citing the need for dealing with prospects of war and security threats, wants Congress to provide President Bush the authority to reorganize federal agencies with limited debate and only a yes/no vote from Congress. Increasing presidential authority is part of Davis' vision for restructuring the federal management process. The new management systems would provide more flexibility to agency managers to promote workers and implement pay-for-performance measures.

<http://www.govexec.com/dailyfed/0303/031003td1.htm>

**Energy efficiency bill receives unanimous approval** (National Journal's Congress Daily 3/20/2003) – The House Government Reform Committee unanimously approved a measure (H.R. 1346) aimed at increasing the federal government's energy efficiency. The bill sets energy reduction goals for federal buildings, requires use of alternate fuels in federal vehicles, and mandates the purchase and use of energy efficient products. The bill also mandates a study to determine possible energy savings from telecommuting.

<http://www.govexec.com/dailyfed/0303/032003markup2.htm>

**Army begins radar tests near Goldsby** (Oklahoman 3/24/2003) – A crop duster sprayed polyethylene glycol, a substance used in lotions and eye makeup, over an area near Goldsby, Oklahoma, to see if the release could be detected by radars. The tests are part of the U.S. Army's bioterrorism test. Substances that are being released include polyethylene glycol, powdered clay, and grain alcohol, each of which has similar characteristics to biological or chemical substances that could be released in an attack. The army hopes that software can be added to existing radars, including those operated by the National Weather Service and Federal Aviation Administration, that will detect such releases.

**New bioterrorism command center launched** (Chicago Tribune 3/12/2003) – Health and Human Services Secretary Tommy Thompson gave a tour of a new command center designed to monitor and assist first responders in the event of a bioterrorism attack. The center includes wall-to-wall images projecting how plumes of sarin gas or botulinum toxin might spread over cities such as Chicago or Austin, TX. The command center is always staffed and is on high alert. The center includes 26 workstations, including ones for Thompson, his deputies, and the U.S. Surgeon General. The center also includes capabilities for videoconferencing, monitoring 4,000 local television stations, communicating with local officials, coordinating with other federal officials, and assessing the number of available hospital rooms in an area. The center gives the department the capability to dispatch medicine and as many as 8,000 emergency health workers. The center can also be used for other emergencies, including natural disasters and monitoring the West Nile virus.

<http://www.chicagotribune.com/news/nationworld/chi-0303120219mar12,1,3356024.story>

**States scrutinize budgets** (Stateline 3/31/2003) – With the states budget crunch, more attention is being focused on information technology expenditures. In Virginia, Governor Mark Warner, a former telecommunications executive, found that the state was spending \$902 million on IT each year, employing 2,580 workers, 3,000 computer servers, and dozens of e-mail systems. Experiences like this are commonplace. Legislators often defer to agency requests due to a lack of knowledge about necessary IT systems. The result is duplication, redundancy, and lack of accountability. Areas such as IT offer prospects for reforms that can save the states tremendous amounts of money without cuts in services or additional taxes. Governor Warner's solution, for example, is to create the Virginia Information Technologies Agency, which will buy and maintain infrastructure, eliminate three existing agencies, and consolidate scores of technology divisions while saving the state more than \$100 million per year. Coupled with other measures, such as centralizing the state's purchasing system, the state can save over half a billion dollars annually. Some see a silver lining in the budget crisis. Reorganizing government is difficult at any time, but when facing a crisis, the political will to do so runs deeper. In addition to reorganization, states are taking the opportunity to fix structural problems, including tax structures and Medicaid reform.

<http://www.stateline.org/story.do;jsessionid=ou71wjazz1?storyId=296599>

**Homeland Security may take on Internet** (National Journal 4/1/2003) – Following attacks on the Internet's root servers and the domain-name system last October, officials from several agencies gathered to discuss Internet security. The result of those discussions seems to be that the Department of Homeland Security will take a lead role in coordinating security of the Internet infrastructure. One of the first tasks is improving communication between government officials and companies who run the servers, so that incipient attacks can be quickly identified. Under a 1998 agreement, the Internet Corporation for Assigned Names and Numbers (ICANN) is responsible for providing root-server security. Homeland Security officials commented that ICANN looks toward the larger security apparatus, but does not focus on day-to-day operations.

<http://www.govexec.com/dailyfed/0403/040103td1.htm>

**Status of Legislation (newly added to report; action noted; legislation passed; legislation failed):**

- HR 238: “Energy Research, Development, Demonstration, and Commercial Application Act of 2003” – Introduced 1/8/2003 by Rep. Boehlert; Referred to House Resources and Science committees; Referred to subcommittees; supports energy research, reduce consumption from imported sources, improve energy efficiency and supply, reduce environmental impacts, aid domestic production, and stimulate markets for advanced energy technologies.
- HR 268: “United States Weather Research Program Act of 2003” – Introduced 1/8/2003 by Rep. Ehlers; Referred to House Committee on Science, Subcommittee on Environment, Technology and Standards; authorizes appropriations for the Weather Research Program for fiscal years 2004-2006; sets research priorities including forecasts of strength and landfall of hurricanes, improving forecasts of heavy precipitation and winter storms, improving flood forecasting and warning systems, improving short and medium-range (2-14 day) forecasts, and examining societal and economic impacts, including evaluating methods for delivering information to users and assessing social and economic impacts.
- HR 460: “Wildfire Prevention Act of 2003” – Introduced 1/29/2003 by Rep. Hayworth; Referred to House Agriculture and Resources committees; Referred to subcommittees; establishes Institutes to conduct research on the prevention of and restoration from wildfires in the interior West.
- S 17: “Global Climate Security Act of 2003” – Introduced 1/7/2003 by Sen. Daschle; Referred to Committee on Environment and Public Works; initiates federal actions to reduce risks from climate change to the economy, the environment, and quality of life (contains major provisions of climate change amendments to Energy Policy Act of 2002).
- S 139: “Climate Stewardship Act of 2003” – Introduced 1/9/2003 by Sen. Lieberman; Referred to Committee on Environment and Public Works; provides for scientific research on abrupt climate change, establishes greenhouse gas emissions tradeable allowances that could be used interchangeably with passenger fuel economy standard credits, limits greenhouse gas emissions in U.S., and reduce dependence upon foreign oil.
- S 194: “National Greenhouse Gas Emissions Inventory and Registry Act of 2003” – Introduced 1/17/2003 by Sen. Corzine; Referred to Committee on Environment and Public Works; establishes and inventory of greenhouse gas emissions and encourage voluntary reductions in emissions.
- S 118: “Emergency Warning Act of 2003” – Introduced 1/9/2003 by Sen. Edwards; Referred to Senate Committee on Commerce, Science, and Transportation; provides for development of an all-hazards public warning system.

- S 212.RS: “High Plains Aquifer Hydrogeologic Characterization, Mapping, Modeling and Monitoring Act” – Introduced 1/23/2003 by Sen. Bingaman; Reported favorably from committee 3/19/2003; authorizes the Secretary of the Interior to cooperate with the High Plains Aquifer States to conduct a hydrogeologic characterization, mapping, modeling and monitoring program for the aquifer (originally introduced in House in 2002).
- HR 748: - Introduced 2/12/2003 by Rep. Udall; Referred to House Committee on Resources; Comment requested from CEQ; requires Council on Environmental Quality to conduct a study on urban sprawl and smart growth.
- HR 1346 – Introduced in House 3/19/2003 by Rep. Turner (Ohio); Referred to House Committee on Government Reform and Reported favorably (3/20/2003); encourages Federal procurement policies that enhance energy efficiency and reduce dependency on non-renewable energy sources.
- S 196 – Digital and Wireless Network Technology Program Act of 2003; Introduced in Senate 1/17/2003 by Sen. Allen (Virginia); Referred to Committee on Commerce, Science, and Transportation and reported favorably (3/13/2003); establishes \$250 million program in National Science Foundation to improve access to and use of digital and wireless network technology at minority-serving institutions; includes efforts to increase scientific, mathematical, engineering, and technology instructions and research.

## AGENCY NEWS

**NOAA names new assistant administrator** (NOAA 3/24/2003) – Mary Glackin has been named to the new position of assistant administrator of NOAA Program Planning and Integration. The office was created following an internal review of NOAA’s structure and operations. The reorganization is part of an effort to increase NOAA’s flexibility, including “matrix management” which brings funding and management from various NOAA offices to focus on a specific issue. The new Program Planning and Integration Office will oversee these matrix programs, which presently include climate, homeland security, and coral reefs. Glackin was formerly deputy administrator for NESDIS.

<http://www.publicaffairs.noaa.gov/releases2003/mar03/noaa03036.html>

**Administration reconsiders definition of ‘inherently governmental’** (Government Executive 3/26/2003) – When the Office of Management and Budget (OMB) releases its revised Circular A-76, it will contain an unchanged definition of jobs that are “inherently governmental” in nature. The draft circular told agencies that jobs should be presumed “commercial in nature” and eligible for outsourcing. The revised circular does retain tight deadlines for completing job competitions and mandates that federal employees who win job competitions be held to binding performance agreements. The circular will also urge agencies to provide training and resources so that employees can field competitive bids.

<http://www.govexec.com/dailyfed/0303/032603p2.htm>

**Federal employees with pay, but not with management** (Government Executive 3/25/2003) – A survey of 100,000 federal employees, conducted by the Office of Personnel Management (OPM), found that nearly two thirds expressed satisfaction with their pay but less than half gave good marks to their agencies’ management. Civil servants in 24 major agencies reported pride in their work, felt their work to be important and of high quality, and a sense of personal accomplishment. When it came to management, however, it was a different story. Only a third of respondents said their organizations; leaders motivate and less than half held leaders in high esteem. They also gave low scores on being receptive to change, maintaining high standards of honesty and integrity, resolving workplace disputes fairly, and favoritism. OPM Director Kay Coles James concluded that more attention needs to be paid to developing and supporting effective leaders. Despite the relative satisfaction with pay, more than one third ranked their pay as poor or very poor. Also, despite overall satisfaction, one-third of respondents said they are considering leaving their organization, with fewer than half of those leaving due to retirement. Executives and managers cited several problems they face: lack of resources and unreasonable workloads among the most prominent factors. The numbers are surprisingly consistent with private-sector surveys done over the last decade, with nearly identical numbers in employee’s rating of teamwork, chances to improve skills, sense of personal accomplishment, benefits, and promotion potential. Results are also similar to a survey by the National Partnership for Reinventing Government: <http://www.govexec.com/dailyfed/0300/030100b1.htm>, completed in 2000. The full report is available from the OPM: <http://www.fhcs.opm.gov/>.

<http://www.govexec.com/dailyfed/0303/032503b1.htm>



**OMB looking at new e-gov initiatives** (Government Executive 3/5/2003) – Budget officials are examining six areas in which multiple agencies developed proposed e-government initiatives. The areas cover data and statistics, human resources, business-management systems, health monitoring, criminal investigations, and monetary benefits. The Office of Management and Budget plans to build teams of agency and OMB representatives around each of the six areas to evaluate whether or not to proceed further with an initiative.

<http://www.govexec.com/dailyfed/0303/030503td1.htm>

**E-government results mixed** (National Journal's Technology Daily 3/13/2003) – The General Accounting Office (GAO) reported mixed results on e-government initiatives to date. The GAO noted that about half of the 24 initiatives have altered cost estimates by more than 30% and that several agencies failed to consider the needs of prospective users or adequately coordinated projects with federal partners. The report concluded that more oversight of the initiatives is needed. The Office of Management and Budget, which oversees the initiatives, noted that many are making progress and those that are faltering will not receive future funding.

<http://www.govexec.com/dailyfed/0303/031303td2.htm>

**Online federal store attracts browsers, not buyers** (Government Executive 3/25/2003) – The General Services Administration (GSA) launched an online site for federal buyers to search for products and services through federal contracts, rather than waiting on price quotes and placing individual orders. A GAO review of activity on the site during 2002 showed that most use the site to compare prices from vendors rather than making purchases. The site was originally conceived as a means to offer common items, but since has expanded to include technical products and services. Vendors argue that it can take several thousand dollars to list data about technical products on the system.

<http://www.govexec.com/dailyfed/0303/032503a1.htm>

**USGS conference focuses on environmental concerns** (USGS 3/27/2003) – The U.S. Geological Survey is hosting a conference that brings together public health experts and earth scientists to discuss the emerging discipline of Medical Geology (see the website announcement at: <http://health.usgs.gov/health2003.html>). Topics on the agenda include: emerging sensor technologies to monitor water supplies; transport of bacteria, viruses, insects, and heavy metals from duststorms in North Africa; dust from the World Trade Center collapse; cancer and drinking water; release of arsenic from burning coal; and monitoring wild birds as early detection of disease outbreaks.

[http://www.usgs.gov/public/press/public\\_affairs/press\\_releases/pr1744m.html](http://www.usgs.gov/public/press/public_affairs/press_releases/pr1744m.html)

**Transportation needs report available** (NOAA 3/21/2003) – NOAA and the Department of Transportation released a report identifying needs for improved weather products in support of surface transportation. The report analyzed surveys of needs in six major sectors: roadways, long-haul railways, marine transportation systems, rural and urban transit, pipeline systems and airport ground operations. The report examines projects, including pilot projects, and suggest future actions to benefit transportation. The report can be downloaded from the Office of the Federal Coordinator for Meteorology: [http://www.ofcm.gov/wist\\_report/wist-report.htm](http://www.ofcm.gov/wist_report/wist-report.htm).

<http://www.publicaffairs.noaa.gov/releases2003/mar03/noaa03035.html>

## **STATE / LOCAL**

**More budget cuts ordered for state** (Oklahoman 3/8/2003) – State officials staved off budget cuts for several months in hopes that revenues would begin to recover. The February numbers revealed that recovery is not on the horizon, necessitating a new round of budget cuts. Although gross production taxes have increased due to higher gas prices, the gains are not sufficient to offset weaknesses in corporate income taxes. Earlier in the legislative session, legislators and Governor Henry authorized supplemental appropriations of \$9.8 million to Corrections and \$25.5 million to Education, but the rainy day fund is nearly tapped out. Only \$12 million remains in a fund that once had \$300 million.

**Energy revenues offset losses** (Oklahoman 3/14/2003) – Soaring gas prices during the winter months have produced welcome revenues to Oklahoma's lagging income. State officials note a 63% increase in gross production tax revenues over the past three months, helping to offset an anticipated \$352 million FY04 deficit from current revenues. The state budget included \$2.52 per thousand cubic feet for fiscal year 2003; prices currently stand at over \$5 per thousand cubic feet. The figure was increased to \$3.76, which still appears to be a conservative estimate according to analysts.

**Drought hits rainy day fund** (Oklahoman 3/25/2003) – Recent emergency appropriations from the state's rainy day fund takes it down to about \$100,000. No additional funds will be deposited in the account unless revenues exceed projections for the fiscal year, a very unlikely prospect. Most of the recent allocations were to corrections, where employees faced 23 furlough days. The added funding cuts that to nine days.

**New study offers recommendations on state budget** (Oklahoman 3/11/2003) – Oklahoma 21<sup>st</sup> Century, a team of economists from OSU and OU affiliated with the State Chamber of Commerce, said long-term structural changes are needed in the Oklahoma revenue structure to dampen boom-and-bust cycles. The study, conducted independently from the Chamber, includes recommendations of capping Medicaid and Temporary Assistance for Needy Families payments, increasing state sales taxes and reducing income taxes, and replacing corporate tax revenues with other revenue streams. The study notes that corporate tax revenues are highly inconsistent. The study also recommends restricting use of the Rainy Day Fund to stabilizing the budget; presently withdrawals can be made for indeterminate "emergency conditions."

**Governor signs tuition bill** (Oklahoman 3/29/2003) – New legislation allows the State Regents for Higher Education to set tuition and fees, without seeking approval from the legislature. The bill allows Regents to raise tuition and fees at the flagship universities to just under the Big-12 average and to a regional average of peer institutions for regional universities and two-year colleges. Tuition and fees at OU and OSU average \$2,977, compared to a Big-12 average of \$3,914. Regional universities are \$875 below the regional average and two-year colleges are \$744 below the regional average.

### **Oklahoma Legislation:**

*Bills listed in the last issue as failing have been removed from this list. See the March summary for more details.*

HB 1051: “Oklahoma Carbon Sequestration Enhancement Act”; develops plan to quantify carbon sequestration activities; creates advisory committee to Conservation Commission; identify opportunities to participate in marketing & credits. **Passed House 100-0, Reported from Senate Energy, Environment and Communications Committee.**

HB 1082 / SB 800: shell bill; “Government Reorganization Act of 2003” / “State Agency Consolidation Act of 2003”. **HB1082 passed House 79-20 (transferring duties from ABLE Commission to OSBI) – Died in Senate Judiciary Committee; SB 800 Died in Committee.**

HB 1083: sets criteria for determining maximum annual yield for aquifers, based upon a minimum basin life of 100 years; restricts permits for use outside of counties overlaying the aquifer. **Passed House 82-16, Passed Senate 27-13, Returned to House.**

HB 1421 / SB 304: places a moratorium on temporary groundwater permits until Water Resources Board develops rules to protect groundwater quality. **HB 1421 Died in Committee; SB 304 Passed Senate 43-1; Died in Hose Committee.**

HB 1512: “Oklahoma Emergency Management Act of 2003” – sets requirements for emergency management offices and personnel; requires emergency preparedness plans; defines makeup of advisory councils; defines hazard mitigation and management programs. **Passed House 101-0, Reported from Senate Veterans and Military Affairs Committee.**

HB 1679: creates Statewide Water Policy Planning Commission; moratorium on sale of waters outside of Oklahoma. **Passed House 88-10, Died in Senate Energy, Environment, and Communications Committee.**

HJR 1024: Amend Oklahoma Constitution to authorize a program for beneficial utilization and protection of natural resources; dedicates revenues for programs, mitigation, and liability. **Passed House 98-1, Reported from Senate Appropriations Committee.**

SB 309: Prohibits new or expanding poultry feeding operations within a one-hundred year flood plain or within one mile of state waters. **Died in House.**

SB 342: Funding for the Oklahoma Wind Power Initiative at EVAC. **Passed Senate 42-0, Reported from House Appropriations and Budget Committee; substitute Rep. Deutschendorf for Rep. Covey as principal House author (Covey and Langmacher co-authors).**

SB 429: Tax credit for new ethanol production facilities. **Passed Senate 43-0, Passed House 96-3, conference requested.**

SB 547: Modifies appointment of state climatologist; requires the Oklahoma Climatological Survey to maintain and operate the Oklahoma Mesonet. **Passed Senate 41-0, Reported from House Higher Education Committee.**

SB 556: Creates Oklahoma Telecommunications Authority to “plan, promote, coordinate and develop a communications infrastructure that will provide a seamless delivery system for voice, data and video capacity throughout the state”. **Passed Senate 40-0, Reported from House Energy and Utility Regulation Committee.**

SJR 8: Voluntary goals to promote renewable energy; creates the Renewable Energy Panel. **Passed Senate 35-11, Died in House Energy and Utility Regulation Committee.**

SB 826: **Creates office of Homeland Security within the Department of Public Safety. Passed Senate 40-0, Passed House 91-1, Referred for Engrossment in House.**

SJR 24: **Pertaining to Homeland Security, naming Oklahoma State Bureau of Investigation Director as head; First Reading 2/18 (Not sure, but maybe Joint Resolutions do not have to go through Committee). No further action in Senate.**

## **BUSINESS / ECONOMY**

**Gas crunch over, but supply issues remain** (Oklahoman 3/11/2003) – As cold weather recedes into spring, natural gas prices are stabilizing well below recent record peaks. During the last week of February, prices climbed as high as \$11.90 per thousand cubic feet, surpassing the previous record of \$10.10 in December 2000. Spot prices jumped as high as \$25. The price has since settled to \$6.52, and is expected to continue downward to the \$4 - \$6 range this summer. Gas supplies, which started the winter at a record 3.2 trillion cubic feet of storage, dropped to 838 billion cf at the end of February. With spring emerging, supplies are not expected to drop substantially. Analysts expect production to refill storage, with an estimated 2.5 to 2.7 trillion cubic feet available for next winter. That should be sufficient, unless there is “sustained cold like this year” according to the analyst. [Note: most places, even in the northern U.S., came out close to normal for the winter overall; a warm start to the winter offset the sustained cold of late January and February].

**New Internet technology surpasses 8600 Mbps** (National Geographic 3/18/2003) – A team of scientists, led by the California Institute of Technology, developed a configuration that would allow a full-length DVD movie to be downloaded in less than five seconds. Even more impressive is that the feat was achieved in the presence of background traffic, suggesting that it could be easily deployed on existing networks. The speed, 8,609 megabits per second, “is 153,000 times faster than today’s modem and close to 6,000 times that of the common standard for Asymmetric Digital Subscriber Line (ADSL) connections,” according to the Caltech news release. The breakthrough is important to a variety of scientific endeavors, many of which rely upon Terabyte-scale data collections.

[http://news.nationalgeographic.com/news/2003/03/0318\\_030318\\_internet.html](http://news.nationalgeographic.com/news/2003/03/0318_030318_internet.html)

**Unix owner sues IBM** (AP/Oklahoman 3/8/2003) – SCO Group, which acquired Unix in 1995, claims that IBM is freely distributing proprietary code by converting aspects of its own Unix variant into Linux. The company has filed a \$1 billion lawsuit against IBM. The move, even though it targets only IBM, could create uncertainty in the market for computer operating systems.

## WEATHER

**Western drought expected to continue** (NOAA 3/20/2003) – The attenuated effects of this past winter’s El Nino means that drought conditions across the western U.S. are likely to persist through spring, according to NOAA officials. Fall and winter precipitation patterns were not sufficient to alleviate the multi-year drought and water supply problems. Meanwhile, the eastern U.S. is likely to experience flooding this spring, as above-normal snowmelt fills rivers and reservoirs. Meanwhile, drought conditions may be emerging in the Plains and Midwest states, where winter snows were far below normal.

<http://www.publicaffairs.noaa.gov/releases2003/mar03/noaa03030.html>

**NWS rolls out new flood website** (NOAA 3/7/2003) – The National Weather Service’s Eastern Region Headquarters has brought a new website online. The site provides detailed information and forecasts on flood conditions in the region. Products include forecasts of the location and timing of flooding, how long flooding will last, river flows over the next 30 days, and a measure of certainty for the forecast. In addition, it allows users to zoom in to regions of interest and provides alerts when flood watches or warnings are in effect. The site is part of the Advanced Hydrologic Prediction System, and has already been deployed in the Mississippi and Ohio River basins.

<http://www.publicaffairs.noaa.gov/releases2003/mar03/noaa03r232.html>

**Hurricane forecasts extended to five days** (NOAA 3/10/2003) – Beginning this year, the National Weather Service will issue five-day forecasts on hurricane tracks and strengths. Since 1964, the NWS has issued 3-day forecasts, but customers indicated that longer lead times were needed. Over the past two years, the NWS has tested new five-day forecasts, and finds that forecast skill at five days is as good as the skill was at 3 days fifteen years ago. The additional lead time will provide more notice to move people and critical supplies out of harms way.

<http://www.publicaffairs.noaa.gov/releases2003/mar03/noaa03024.html>

**Lake Superior nearly frozen for first time since 1979** (Minnesota Star-Tribune 3/6/2003) – In early March, ice covered more than 90% of Lake Superior, the greatest extent in five years. Lakes Huron and Erie were ice-covered, and northern Lake Michigan was frozen as well. Relentless cold during January, February, and the first part of March led to the ice buildup, which in vast portions of the lake amounted to 12 to 28 inches. Mild weather in October through December kept ice buildup minimal early in the season. In fact, the mild weather early in the season offset the cold start to 2003, leaving temperatures pretty much average for the period.

<http://www.startribune.com/stories/462/3735882.html>

**Great lakes near record low levels** (University of Wisconsin 2/12/2003) – The Great Lakes have unusually low water levels for this time of year, and the recent dry weather in the basin leads some to speculate that new record lows may be set this summer. Dry soils are compounding the problem. Expectations are that snowmelt and rainwater will replenish the soils, leaving less runoff to fill the lakes. The Army Corps of Engineers provides weekly lake level updates: <http://huron.lre.usace.army.mil/levels/hmpglv.html>.

[http://www.seagrant.wisc.edu/outreach/coastal\\_engr/whatsnew/ce\\_lakelevelupdate.asp](http://www.seagrant.wisc.edu/outreach/coastal_engr/whatsnew/ce_lakelevelupdate.asp)

## CLIMATE

**Climate timeline web site announced** (NOAA 3/27/2003) – NOAA's Paleoclimatology Program led the development of a climate timeline web site. The site provides a tutorial on climate variability, a glossary of terms, an overview of the climate system, a data access interface, and a quiz for users to test their knowledge. The site was developed in collaboration with researchers and educators at the National Climate Data Center, National Geophysical Data Center, and the Cooperative Institute for Research in Environmental Sciences. Visit the site at: <http://www.ngdc.noaa.gov/paleo/ctl/>.

<http://www.publicaffairs.noaa.gov/releases2003/mar03/noaa03037.html>

**Pinatubo eruption studied for effects on Arctic Oscillation** (NASA 3/12/2003) – Researchers at Rutgers University are looking into how large volcanic eruptions may affect the Arctic Oscillation. Georgiy Stenchikov, the lead author of a recent paper in the Journal of Geophysical Research, notes that radiative cooling associated with volcanic aerosols decrease the temperature gradient in the troposphere. This inhibits processes that slow counterclockwise winds blowing around the North Pole, mostly in the stratosphere, which in turn strengthens a positive phase of the Arctic Oscillation. The positive phase is marked by a strong circumpolar vortex that draws warm air northward and inhibits the southward progression of cold air, leading to warm winters across latitudes south of 55 degrees North.

<http://www.gsfc.nasa.gov/news-release/releases/2003/03-27.htm>

**Rising cloud base dries out forests** (New Scientist 3/26/2003) – Cloud ceilings in the northeastern United States have been rising over the past 30 years, according to a new study. Earlier research showed a similar characteristic in Costa Rica, which was initially attributed to rising sea surface temperatures. However, more recent research points to deforestation as the cause, creating a pool of warmer, drier air that is advected into the region. The phenomenon results in damaged forest ecology and declining populations of toads and frogs. The increase has been substantial; the northern parts of the Appalachians have seen an increase on average of six meters per year since 1973. The result is that spruce and fir trees are not able to as effectively scavenge water from the clouds, which means less water accumulates on the forest floor which in turn harms moisture-loving animals such as amphibians. Roger Pielke, one of the team members, notes that deforestation and urbanization in the region could create a pool of warm, dry air, similar to the case in Costa Rica. However, he cautions, data come from regional airports, and may be influenced by local urbanization effects.

<http://www.newscientist.com/news/news.jsp?id=ns99993521>

**Vegetation essential to climate models** (MIT 3/31/2003) – Researchers at MIT found that carbon dioxide and solar output were not sufficient to explain the southward advance of the Sahara desert from 6,000 years ago. When they included vegetation as a model parameter, the results improved dramatically. The region started as grasslands, but quickly became desert – on the scale of decades rather than centuries. The transition shows how alteration of the landscape can have a dramatic, and in some cases permanent, effect on the local climate.

<http://web.mit.edu/newsoffice/nr/2003/sahara.html>

**Antarctic ice sheet may hold clues to end of ice age** (National Geographic 3/17/2003) – New models point to the collapse of the Antarctic ice sheet as the cause of the end of the last ice age, 14,000 years ago. The theory is based on analysis of corals and organic materials in the Southern Hemisphere, which points toward an increase in sea level by 20 meters over 200 years. According to the researchers, a massive collapse of Antarctica's ice sheet produced an influx of fresh water – roughly one million cubic liters per second – that created an oceanic current affecting global climate. Warm water was transported northward into the North Atlantic, leading to a 1,000-year climate shift and deglaciation of North America. The warming of the North was coupled with what is known as the Antarctic Cold Reversal, in which the southern hemisphere cooled. The computer model used to simulate the Antarctic ice sheet collapse captures both the northern hemispheric warming and the southern cooling. The finding counters the prevailing notion that the North American ice sheet melted first.

[http://news.nationalgeographic.com/news/2003/03/0317\\_030317\\_iceshelf.html](http://news.nationalgeographic.com/news/2003/03/0317_030317_iceshelf.html)

**Carbon Dioxide critical factor in Antarctic ice** (EurekaAlert! 1/15/2003) – University of Massachusetts researchers used a global climate model to study the impact of various factors in the formation of the Antarctic ice sheet. The team considered four factors: heat transport in the oceans, plate tectonics, carbon dioxide levels, and orbital variation. The prevailing theory is that as South America drifted away from Antarctica, the Drake Passage was opened, allowing a circumpolar oceanic current, deflecting warm water northward and chilling the continent. The researchers ran the model with and without the Drake Passage opening, and found that oceanic heat transport played only a secondary role in the cooling of the continent, with carbon dioxide concentrations as the primary source. Their findings appear in the January 16 issue of Nature.

[http://www.eurekaalert.org/pub\\_releases/2003-01/uoma-usr011503.php](http://www.eurekaalert.org/pub_releases/2003-01/uoma-usr011503.php)

**Sun may play big factor in global warming** (NASA 3/20/2003) – Richard Wilson, lead author of a recent study published in Geophysical Research Letters, detected a 0.05 percent per decade increase in solar radiation during the solar minima. Although records only extend to the late 1970s, if the trend continued for a century, it could provide a significant component of the global warming documented by the IPCC, according to Wilson. The study combined data from several platforms to determine the trend in total solar irradiance between the solar minima of solar cycles 21 and 23 (1978 to present).

<http://www.gsfc.nasa.gov/news-release/releases/2003/h03-106.htm>

**Younger trees better at storing carbon** (NASA 3/21/2003) – A plant ecologist from the University of Texas discovered that the ability of tree stands to store carbon changes as they regenerate from fire. Marcy Litvak, lead author of the study appearing in JGR – Atmospheres, found that trees between 20 and 40 years old are more effective at storing carbon than those 70 years old or older. As boreal forests age, they make a transition from Aspen and Jack Pine to Black Spruce. The fast-growing Aspen and Jack Pine dominate in the 20-50 year range, while the slower-growing Black Spruce eventually becomes dominant around 70 years after a fire.

<http://www.gsfc.nasa.gov/news-release/releases/2003/03-32.htm>



## **ENVIRONMENT**

**Regulations reviews nearing end** (AP/Oklahoman 3/1/2003) – Four of five environmental management regulatory changes sought by the Bush administration are nearing completion. The changes include shortening the time for environmental reviews, limiting public appeals, and requiring coordination among agencies of endangered species studies. An additional plan to reduce time spent on endangered species reviews is still in process. The new rules lift restrictions on the size of trees that can be cut during reduction of undergrowth for forest fire protection. Last year's wildfires burned seven million acres and cost the federal government \$1.5 billion. The controversial recommendations would reduce the amount of land vulnerable to wildfires, but critics claim wildfires are merely an excuse to return to timber harvesting policies of the 1980s.

**Domenici seeks FY04 funds for forest management** (U.S. Senate 3/13/2003) – Senate Energy and Natural Resources Chairman Pete Domenici noted that Forest Service needs at least \$500 million to cover an existing backlog of forest rehabilitation and restoration projects, mostly in the western U.S. The Senator seeks to remove dead and dying trees before an expected severe fire season this year. With drought continuing across large areas of the West, another devastating fire season appears likely.

**India planning major water resources project** (New Scientist 2/27/2003) – India is considering a \$200 billion plan for diverting water from the Ganges and Brahmaputra rivers in the North and diverting them to parched areas of the south. The plan calls for a series of reservoirs and pumps to move and store water between basins. In addition, hydroelectric plants would generate 34,000 megawatts of electricity, one third of which would be needed to run the pumps. Critics, including previous leaders of the Ministry of Water Resources, describe the plan as “technological hubris”, citing billions of dollars already spent on half-complete water projects. Instead, they argue, India's solution to its water problems lies in better management of its existing resources. Neighbors, especially Bangladesh, are concerned about possible decreases of water available to them in the dry season.

<http://www.newscientist.com/news/news.jsp?id=ns99993435>

**World water crisis worsening** (National Academies 3/20/2003) – A new United Nations report, presented at the World Water Forum in Kyoto, states that in the next twenty years, the average amount of water available for each person worldwide will decline by one-third. The report estimates that two to seven billion people, out of a population of 9.3 billion, will experience water scarcity by mid-century. Climate change, increased pollution, and warmer water temperatures will worsen quality and decrease availability.

<http://www.nationalacademies.org/headlines/#sh0320b>

**Oklahoma and Arkansas talking again** (AP/Oklahoman 3/20/2003) – Months after Oklahoma and Arkansas environmental officials ceased discussions over Oklahoma's proposed water quality standards, the two sides are back at the table. The talks, mediated by the EPA, began again and will continue in late April. Oklahoma claims Arkansas poultry operations are harming eastern Oklahoma's rivers and water supplies. Arkansas claims that Oklahoma's proposed standards are too stringent and would cripple economic development in northwest Arkansas.

**Tulsa settles lawsuit** (Oklahoman 3/26/2003) – The City of Tulsa settled a lawsuit filed against the City of Decatur, Arkansas and six Arkansas poultry companies. The lawsuit revolved around excessive phosphorus discharged into rivers that are the source of Tulsa’s water supply. Details of the settlement were not disclosed. The lawsuit sought improvements in Decatur’s wastewater treatment plant and in handling poultry waste in the region.

**Arbuckle aquifer needs further study** (Oklahoman 3/10/2003) – The Arbuckle-Simpson aquifer, at the heart of a debate over a proposed water sale, needs more study according to experts. The water sale, which would send water from the aquifer near Sulphur to towns in Canadian County, is based upon a 1991 study that suggested sufficient yields. However, a Texas hydrologist when reviewing the study noted that the data were collected more than 25 years ago. Ascertaining sustainable yields for the aquifer is complex due to local geology, similar to characteristics of the Edwards aquifer that feeds San Antonio, which has been studied extensively since 1930. The Bureau of Reclamation has set aside \$500,000 for a study, but U.S. Representative Brad Carson said a complete study would probably take five or more years and cost \$5 million. In the meantime, Carson said he supported efforts in the Oklahoma state legislature to enact a moratorium on water sales from the aquifer until such a study is completed.

**OSU research project examines arsenic in water wells** (Oklahoman 2/7/2003) – The U.S. Geological Survey, the Environmental Protection Agency, and researchers at Oklahoma State University will conduct a study on arsenic in municipal groundwater in Norman, Oklahoma. The city has ten wells where arsenic levels exceed new EPA standards. The project will examine how arsenic enters the wells, and examine if the wells can be plugged with concrete at certain levels to prevent the release of arsenic into the water within the well.

## **SCIENCE & TECHNOLOGY**

**NRC urges more attention on knowledge transfer** (National Academies 3/27/2003) – A new report by the National Research Council, “Satellite Observations of the Earth’s Environment: Accelerating the Transition of Research to Operations”, says that NASA and NOAA need to do more to improve transfer of research findings into operational benefits. The report cites barriers to knowledge transfer, including insufficient long-term planning, cultural and organizational issues, lack of scientific understanding, and inadequate resources. As an example of the problem, the report cites the development of satellite-based lightning detection systems. Although the technology has existed since 1995, no pathway exists to move sensors from research satellites to operational weather satellites. The report recommends creation of a joint NASA-NOAA office to plan, coordinate, and support the transitioning of NASA research to NOAA operations. Data from research missions should be tested in operational settings, and operational data collection should be of sufficient quality for research purposes.

Report: [http://www.nap.edu/catalog/10658.html?onpi\\_newsdoc032703](http://www.nap.edu/catalog/10658.html?onpi_newsdoc032703)  
<http://www.nationalacademies.org/>

**Federal IT spending increases dramatically** (National Journal’s Technology Daily 3/19/2003) – Federal spending on information technology increased from \$405 million in 1997 to \$4.3 billion in 2001, under the General Services Administration’s Federal Technology Service. GSA negotiates the contracts with private-sector firms, allowing federal agencies to place orders directly with the firms at contract rates. Although most expenditures, 62%, went to large companies, the GSA contracts represented significant sources of income for medium and small businesses, accounting for 40% and 35%, respectively, of their revenues.

<http://www.govexec.com/dailyfed/0303/031903td2.htm>

**Seeking Scientists** (Government Executive 3/10/2003) – Recent studies point to a looming crisis in the availability of skilled scientific and technical professionals. With many scientists in government positions nearing retirement, production of new scientists and engineers is failing to keep pace with projected demands. Four percent fewer physical scientists and engineers are produced each year. In each of the past five years, more degrees were granted in parks and recreation than in electrical and electronics engineering. The problems are not only among the elite corps of professionals; the Hart-Rudman Commission’s report in 1999 noted that “We must raise levels of math, science, and technology literacy throughout society.”

<http://www.govexec.com/dailyfed/0303/031003ff.htm>

Following a recent report from the Government University Industry Research Roundtable (GUIRR), Dr. Jerome Grossman, a member of GUIRR, wrote: “As the country struggles to contain terrorism and strengthen the economy, there’s a growing awareness that these campaigns rely largely on a dangerously scarce resource: U.S. scientists and engineers. The shortage of technical and scientific human capital is a complex, deep-rooted problem. Fixing it calls for making major changes in schools and universities, not to mention drawing more women and minorities into the top echelon of technical fields, where they are severely underrepresented. The challenges are abundantly clear.”

<http://www4.nationalacademies.org/onpi/oped.nsf/By+Date?OpenView> (October 11, 2002)